Bluetooth® Cordless Hand Scanner (CHS)

1D Imager Models — 8Ci User's Guide









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7/2013 Document# 6410-00345 A

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Other than the above, Socket Mobile can assume no responsibility for anything resulting from the application of information contained in this manual.

Please refrain from any applications of the Socket *Bluetooth* Cordless Hand Scanner that are not described in this manual. Please refrain from disassembling the *Bluetooth* Cordless Hand Scanner. Disassembly of this device will void the product warranty.

You can track new product releases, software updates and technical bulletins by visiting the Socket Mobile website at: <u>http://www.socketmobile.com.</u>

IMPORTANT! The information in this User's Guide pertains to 1D imager versions of the Socket Bluetooth Cordless Hand Scanner (CHS) hardware, which have the following part numbers:

CHS 8Ci Part Number 8550-00067

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1 | INTRODUCTION

Thank you for purchasing the Socket *Bluetooth* Cordless Hand Scanner (CHS) 8Ci. The CHS is a portable handheld barcode scanner that is small enough to be attached to a smartphone with the Socket Klip Case and used with one hand. The 1D imager of the CHS enables you to scan data from 1D barcodes into a wide variety of computers, smartphones and PDAs.



PACKAGE CONTENTS



CHS 8Ci Scanner



Lanyard



USB Charging Cable

PRODUCT REGISTRATION

Socket highly recommends that all customers register their products. Product registration is required to access technical support. You can also opt in for special offers, upgrades, and new product information. Register online at: <u>http://support.socketmobile.com</u>. Alternatively, if you install SocketScan 10, you can register the CHS through the software.

SOCKETCARE[™] SERVICE PROGRAM

SocketCare is an enhanced service program that features priority technical support, accelerated repair and replacement and more. http://www.socketcare.com/

- SocketCare Plus 2 year SKU# SC1804-1349
- SocketCare Plus 3 year SKU# SC1805-1350
- SocketCare Comprehensive Plus SKU# SC1806-1351 (requires previous purchase of SocketCare Plus 2 or 3 year program)

SYSTEM COMPATIBILITY REQUIREMENTS / COMPATIBLE DEVICES

For the latest device compatibility information, please use our Compatibility Checker: http://www.socketmobile.com/CompatibilityChecker/

OS	System Compatibility Requirements / Compatible Devices	Bluetooth HID Support	Bluetooth SPP Support
Windows	 Windows 8, 7, Vista, XP 		
РС	Microsoft, Toshiba, or Broadcom		
	BIUELOOLTI SLACK		X
RT			X
Windows	Windows Embedded Handheld 6.x		Microsoft or Broadcom
Embedded			Bluetooth stack
Handheld			
Windows	Windows Phone 8		Х
Phone			
Apple iOS	iPod touch (4th generation)		
	iPod touch (3rd generation)		
	iPhone 5		
	iPhone 4S		
iPhone 4			
	iPhone 3GS		
iPad mini			
iPad (3rd generation)			
	iPad 2		
	iPad		
Mac OS*	 Mac OS X 10.4 to 10.6.6 for Mac / MacBook 		X
	Blueteeth driver v2 24f2 (v106E) or		
	• Bluetooth driver v2.2413 (v1965) of v2.37f1		
Android	Android 2.1 or later	Android 2.2 or later	Android 2.1 or later
OS		with HID support	
Blackberry	BlackBerry OS 5.0.0.714 or later for Bold	Х	
OS	9700 and Bold 9900**		
QNX	BlackBerry PlayBook		Х

*Compatibility verified for latest models at time of testing. Other models or Bluetooth driver versions not tested. **Other devices not tested with SocketScan 10 and may require the previous software version.

ADDITIONAL DOCUMENTATION

Download *Quick Start Guides, Command Barcode Sheets*, the *SocketScan Advanced Programming Guide* or other manuals: http://www.socketmobile.com/support/downloads/

ABOUT BLUETOOTH HID AND SPP MODES

The CHS supports two kinds of *Bluetooth* connections (known as *Bluetooth* profiles): SPP (Serial Port Profile) and HID (Human Interface Device), each with its advantages and disadvantages.



By default, the CHS is set to HID mode for Keyboard devices, which requires no software installation.

For better performance, Socket highly recommends that you use SPP mode or iOS mode (especially if scanning barcodes that contain a lot of data).

Feature	CHS with HID mode	CHS in SPP mode for	CHS in iOS mode
		Android	
No software installation		Х	Х
required			
Supports SocketScan 10	Х		Х
software with Socket EZ			
Pair			
Non-printable ASKII	Х		
UNICODE support			
International keyboard	French, German,	As supported by OS	As supported by OS
support	Spanish		
Parsing / data checks	Х		
(with SocketScan 10			
SDK)			
Binary data (with SDK)	Х		
Scanner configuration	Special barcodes	Scanner Settings app or	Scanner Settings app or
methods		special barcodes	special barcodes
Scanner configuration	Limited configuration	Many configuration	Many configuration
options	options	options	options
Barcodes containing a	Less efficient	More efficient data	More efficient data
lot of data	communications may	communications	communications
	lead to slower		
	performance		

ABOUT SOCKETSCAN 10 SOFTWARE

SocketScan 10 keyboard wedge software for Android OS enters scanned data directly into any program as if the data were manually typed. It includes a utility for configuring Prefix/Suffixes, sounds, symbologies, and other settings for the CHS. Download the latest software free from: http://www.socketmobile.com/support/downloads/



Software for *Bluetooth* SPP mode only. No software installation required for HID mode.



SocketScan 10 keyboard wedge software is designed for scanning 7 bit ASCII data. For Unicode, DoubleByte, Multibyte (e.g., for Japanese or Chinese) or binary data, use the SocketScan 10 SDK to convert the data before it is sent to your application.

ABOUT SOCKETSCAN 10 SDK

If you are a developer who would like to add support for the CHS to your mobile application, Socket offers the SocketScan 10 SDK with support for Apple iOS, Android, Windows, and BlackBerry OS.

The SDK is available to members of the Socket Mobile Developer Program (\$19.95.year). For more information: http://developer.socketmobile.com/

ACCESSORIES

HARDWARE FEATURES

Product Diagram



LED Status Indicators

	LED Activity	Meaning
Bluetooth	1 BLUE blink per second	Bluetooth is ON but not
Front LED		connected.
	1 BLUE blink per 3 seconds	CHS is connected to host device.
Good Read	GREEN	Data successfully transmitted to
Side LED	(while scanning)	host device.
Battery Status	GREEN	Battery is fully charged.
Side LED	(while charging)	
	RED Blinking	20% or less battery capacity
	(while scanning)	remaining.
	RED off	Battery status is good.
	(while scanning)	

Status Indicator Beeps

Beep Pattern	Meaning
Low-high tone	Power ON
High-low tone	Power OFF
1 beep	CHS connected to host device and ready to scan barcodes.
1 beep low	You have double-pressed the power button and enabled support for
	simultaneous scanning and onscreen keyboard entry for Apple iOS.
1 beep with green LED	Data successfully scanned and sent to host device.
2 beeps, same tone	CHS disconnected from host device.
1 long beep	CHS unsuccessfully tried 30 times to connect to the last host device it paired
	with. CHS will remain unpaired.
5 beeps	CHS detects an internal fault. Power OFF to reset the error condition. If
	connected to host device, scanner will disconnect during reset.

BLUETOOTH MODE SEQUENCE

When the CHS is powered on, its *Bluetooth* mode will gradually change if no connection is made.

Time after turning on CHS	Bluetooth mode
0-5 minutes	Discoverable and connectable
5-20 minutes	Connectable
20 minutes	CHS automatically powers off

SIMULTANEOUS USE OF CHS AND SOCKET MOBILE PLUG-IN DEVICE ON THE SOMO 655

You can use the CHS and a Socket Mobile plug-in barcode / RFID / magnetic stripe reader simultaneously on a SoMo 655 handheld computer, but, you will need to run two different versions of SocketScan concurrently.

- For the CHS, use SocketScan 10, which you can download from: http://www.socketmobile.com/support/downloads/data-collection/series7/ss10/
- For Socket plug-in devices, use SocketScan 7 (or older), which you can download from: http://www.socketmobile.com/support/downloads/data-collection/series5/

2 | SCANNER SETUP

CHARGING THE SCANNER

The CHS must be fully charge before first use. Initial charging takes about 4 hours with the USB charging cable. Side LED will display green when fully charged.

Insert Micro USB cable into port and plug in the AC adapter. The CHS will beep when connected properly to the adapter.



POWER ON

Press and hold down the small power button until the CHS beeps (low-high tone).

See below for instructions on pairing and connecting your scanner with your Apple or Android devices.

3 | GETTING STARTED

3 STEPS TO SUCCESSFUL SCANNING:

1. Hold the scanner 5-7 cm away from the barcode.



2. Aim the scan beam straight across the entire barcode.



3. Keep your hand steady!



4 | SETUP FOR APPLE IOS

This CHS can be used with the following Apple devices:

- Apple iPhone 5
- Apple iPod touch 5th Generation



Before you begin, make sure the CHS is fully charged (see **Chapter 2 | SCANNER SETUP**).

CONNECTION OPTIONS

The CHS offers two connection options for Apple iOS: HID and SPP. For more information, see **About** *Bluetooth* HID and SPP Modes.

Bluetooth mode	Pros	Cons
HID	 No SocketScan 10 software installation needed 	 Limited configuration options Limited to printable ASCII and some non-printable characters Less efficient data communications for barcodes containing lots of data iPhone 3G not supported
iOS (equivalent to SPP)	 Apple tested and certified Many configuration options Broad character set, including non-printable ASCII, international keyboards More efficient data communications for barcodes containing lots of data 	 Compatible iOS application developed with SocketScan 10 SDK required No SocketScan 10 keyboard wedge software offered

Socket highly recommends that you use the CHS in iOS mode (equivalent of SPP). Learn more: <u>http://www.socketmobile.com/pdf/techbrief/socketscan-10-sdk_white-paper.pdf</u>.

The screenshots shown in this chapter may differ from your device screen depending on your device type.

Bluetooth Connection – Apple – HID Mode

Connect your CHS with an Apple device using HID mode. (This is the default mode.)

- 1. Power on the CHS.
- 2. Set the CHS to HID mode using the barcode on page 10.
- 3. Enable *Bluetooth* on the Apple device. A *Bluetooth* device search will begin.
- 4. Select Socket CHS in the list of found devices.
- 5. Tap **Pair** if prompted.
- 6. The CHS will beep once to confirm connection.

Now you are ready to scan barcodes in HID mode using your Apple device!

Bluetooth Connection – Apple – iOS Mode

Connect your CHS with an Apple device using iOS mode. (This is required only the first time you connect.)

- 1. Power on the CHS.
- 2. Set the CHS to iOS mode using the barcode on page 9.
- 3. Enable *Bluetooth* on the Apple device. A *Bluetooth* device search will begin.
- 4. Select Socket CHS in the list of found devices.
- 5. Tap **Pair** if prompted.
- 6. The CHS will beep once to confirm connection.

Now you are ready to scan barcodes in iOS mode using your Apple device!

Use Scanner Settings (available at the App Store - http://www.socketmobile.com/appstore) or another compatible application developed with the SocketScan SDK on your Apple device.

See page 15 of chs 1d imager manual

5 | SETUP FOR ANDROID

This CHS can be used with the Android Samsung Galaxy S4

Before you begin, make sure the CHS is fully charged (see Chapter 2 | SCANNER SETUP).

CONNECTION OPTIONS

P

The CHS offers two connection options for Android: HID and SPP. For more information, see **About** *Bluetooth* HID and SPP Modes.

Bluetooth mode	Pros	Cons
HID	 No SocketScan 10 software installation needed 	 Limited configuration options Limited to printable ASCII and some non-printable characters Less efficient data communications for barcodes containing lots of data Compatible only with Android 2.2 and later devices with support for HID Peripheral devices
SPP	 Many configuration options Broad character set, including non-printable ASCII, international keyboards More efficient data communications for barcodes containing lots of data Compatible with Android 2.1 and later 	 Requires installation of SocketScan 10 Keyboard wedge software or an application developed with SocketScan 10 SDK

Socket highly recommends that you use the CHS in SPP mode. Learn more: http://www.socketmobile.com/pdf/techbrief/socketscan-10-sdk white-paper.pdf.

The instructions in this chapter are based on the Asus Nexus 7 running Android 4.2. Menus will appear differently on different devices.

When SocketScan 10 is running, you can only use the keyboard provided by SocketScan 10. You cannot use SWYPE or any custom keyboards. To enable use of another keyboard, you can use the SocketScan 10 SDK (available separately). http://www.socketmobile.com/products/bluetooth-barcode-scanners/softwaredevelopment-kit/

Bluetooth Connection – Android - SPP

To install the software and configure your device:

- 1. Use this barcode to find SocketScan 10 software for your Android device in the Google Play Store, or search for it manually.
- 2. Follow the on-screen instructions to download and install SocketScan 10. If prompted, allow the app to acces your *Bluetooth* settings / USB storage / SD card.
- 3. If SocketScan 10 prompts you to turn on *Bluetooth*, tap Allow.
- 4. You will be prompted to set SocketScan 10 as the keyboard language. Tap Back.
- 5. Touch Home | Apps | Settings | Language & input.
- 6. Under Keyboard & Input Methods, select SocketScan 10. Tap Back
- 7. In SocketScan 10, tap Menu | Input Method. Select SocketScan 10. Tap Back.

To pair and connect the CHS and Android device:

(required only the first time you connect)

- 1. Power on the CHS.
- 2. In SocketScan 10, touchMenu | Socket EZ Pair.
- 3. Scan the barcode on the screen. The CHS will beep 3 times.
- 4. Touch On screen. Touch 1D Scanner.
- 5. Scan the barcode on the screen. The CHS will beep 3 times.
- 6. When notified of a pairing request, swipe the notification down. Touch Pairing request. Touch Pair.
- 7. After the CHS pairs and is ready to scan barcodes, it will beep once. The icon at the top of the screen will also change (see below). Touch Back. Status Bar Icon CHS not connected. CHS connected.
- 8. A CHS registration icon will appear on top of the screen. Swipe the icon down to open the registration software. Follow the instructions to register your CHS.

Now you are ready to scan barcodes in SPP mode using your Android device!

APPENDIX A SPECIFICATIONS

Light Source	630nm +- 30nm visible red LED
Scan Rate	5 scans / sec
Sensor	Linear CMOS sensor
Resolution	5mil / 0.127mm
Bluetooth Profile	SPP, HID
Battery Life	8 hours (1 scan / 5 sec)
Charge Time	4 hours fully charged
Wireless Range	10M / 33ft line of sight
Operating Temp	0° to 50° C (32° to 122° F)
Symbologies	All major 1D barcodes

APPENDIX B SAFETY AND USAGE TIPS

SCANNING TIPS

Practice to determine the best scanning distance for your type of barcode.

SCANNING DISTANCE

• The best scanning distance varies depending on barcode size, symbology, label media, W-N Ratio, and scan angle. Check the Decode Zone in Appendix D to determine the proper distance between the scanner and barcode.

- The larger the barcode, the further away you should position the scanner.
- The tighter the bars of the barcode, the closer you should position the scanner.

ABOUT BLUETOOTH AND HEALTH

Bluetooth wireless technology allows you to use short-range radio signals to connect a variety of devices, such as barcode scanners, mobile phones, Pocket PCs, notebook computers, printers, LAN access points, and many other devices at home or work. These radio signals replace the cables that have traditionally connected these devices.

Bluetooth products have small radio transmitters and receivers. Output power is normally very low, only 15.75 mW. This gives a working range of approximately 10 meters.

The maximum exposure levels from *Bluetooth* products are far below recommended safety guidelines. At most, typical *Bluetooth* devices (15.75 mW) reach only one percent of the prescribed safety levels.

PRODUCT CARE

- Do not expose your product to liquid, moisture or extreme humidity.
- Do not expose your product to extreme high or low temperatures.
- Do not expose your product to lit candles, cigarettes, or cigars, or to open flames, etc.
- Do not drop, throw or try to bend the product, as rough treatment could damage it.
- Do not paint your product, as the paint could obstruct parts and prevent normal use.

• Do not attempt to disassemble your product: a broken warranty seal will void the warranty. The product does not contain consumer serviceable components. Should your CHS need service, contact Socket technical support at: http://support.socketmobile.com

• Treat your product with care. Keep in a clean and dust-free place.

• Changes or modifications of this product, not expressly approved by Socket, may void the user's authority to operate the equipment.

ANTENNA CARE

Do not place a metallic shield around the Socket *Bluetooth* Cordless Hand Scanner since it will reduce the radio transmission efficiency.

EFFICIENT USE

For optimum performance, please make sure that there is no metal surrounding your Socket *Bluetooth* Cordless Hand Scanner.

DRIVING

RF energy may affect some electronic systems in motor vehicles, such as car stereo, safety equipment, etc. Check with your vehicle manufacturer to be sure that the Socket *Bluetooth* Cordless Hand Scanner will not affect the vehicle's electronics.

AIRCRAFT

• Turn off your Socket Bluetooth Cordless Hand Scanner before boarding any aircraft.

• To prevent interference with communications systems, you must not use your Socket *Bluetooth* Cordless Hand Scanner while the plane is in the air.

• Do not use it on the ground without permission from the crew.

RADIO FREQUENCY EXPOSURE

Your Socket *Bluetooth* Cordless Hand Scanner contains a radio transmitter and receiver. When in operation, it communicates with a *Bluetooth* enabled mobile computer by receiving and transmitting radio frequency (RF) magnetic fields in the frequency range 2400 to 2483.5 MHz. The output power of the radio transmitter is 15.75 mW. The Socket *Bluetooth* Cordless Hand Scanner is designed to be in compliance with the RF exposure limits set by national authorities and international health agencies¹ when installed or used separately from other antennas or radio transmitters.

ICNIRP, "Guidelines for limiting exposure to time-varying electric, magnetic, and electromagnetic fields (up to 300 GHz)",

FCC Report and Order, ET Docket 93-62, FCC 96-326, Federal Communications Commission (FCC), August 1996. Radiocommunications (Electromagnetic Radiation Human Exposure) Standard 1999, Australian Communications Authority (ACA), May 1999.

Examples of RF exposure standards and guidelines:

International Commission on Non-Ionizing Radiation Protection (ICNIRP), Health Physics, vol. 74, pp 494-533, April 1998. 99/519/EC, EU Council Recommendation on the limitation of exposure to the general public to electromagnetic fields 0 Hz – 300 GHz. Official Journal of the European Communities, July 12, 1999.

ANSI/IEEE C95.1-1992, "Safety levels with respect to human exposure to radio frequency electromagnetic fields, 3 kHz to 300 GHz", The Institute of Electrical and Electronics Engineers, Inc., New York, 1991.

APPENDIX C BARCODE LABEL SPECIFICATIONS

All barcode symbols/labels should satisfy the appropriate AIM Uniform Symbology Specification.

Note: The CHS 8Ci can also scan barcodes on device screens.

BACKGROUND SUBSTRATE:

The barcode symbol should be printed on material (media) that is reflective and has a matte (not glossy) finish. A background diffuse reflectance of at least 70% to 80% is desirable for optimum contrast. Retro-reflective media should be used to obtain decode distances greater than 36 inches.

INK COLOR AND TYPE:

The inked bars should not exceed 25% reflectance at the wavelength that is being used for reading, whether printed with black ink or colored ink. The reflectance value should not vary more than 5% within the same character.

VOIDS AND SPECKS:

The code should be printed clearly, free of voids, specks, blemishes and lines that could "fool" the scanner. Specks or blemishes in the white spaces, or false or missing bar sections could be interpreted by the reading equipment as part of the code. Generally, the width of such flaws is more serious than the height. Code symbols/ labels should be rejected if these defects are present.

DEFINITION:

The bars in the barcode symbol should be well defined. Their edges should not be rough or fuzzy, so that the bars and spaces have the proper widths intended for the barcode symbology used.

CONTRAST:

Background reflectance (that of the substrate on which the codes are printed) should always provide a good contrast relative to the ink reflectance (that of the code bars). The difference between the two should be at least 37.5% at the wavelength used for reading.

TOLERANCE:

The ratio of the widths of bars and spaces in a barcode symbol must conform to the appropriate AIM barcode specifications and can cause problems if not correct throughout the barcode. Problems can occur when bar edges are smeared or rough, or when they exhibit voids.

APPENDIX D DECODE ZONE

The decode zone for the CHS 8Ci is shown below. The minimum element width ("X Dimension" or barcode "size") is the width in thousandths of an inch (mils) of the narrowest element (bar or space) in the symbol. The figures shown are the typical scanning distances (depths of field) for selected barcode sizes. The maximum usable length of a barcode symbol (Width of Field) at any given range is also shown.



*Minimum distance determined by symbol length and scan angle

APPENDIX E COMMAND BARCODES

Scan command barcode(s) to quickly configure the CHS 8Ci. By default, the CHS 8Ci is in HID mode as a Keyboard device.

Many of the command barcodes only work with a scanner in a particular *Bluetooth* mode as indicated by the header row of each table.

All Bluetooth Connection Modes OK

Scan only with CHS in SPP or iOS Mode

Scan only with CHS in HID Mode

IMPORTANT! Make sure the CHS is not connected to computer / device before scanning a command barcode!

By default, the CHS is in HID mode as a Keyboard device.

You may want to cover adjacent barcodes before scanning a command barcode to prevent scanning the wrong code.

For scanners in *Bluetooth* SPP or iOS mode, you can alternatively configure some settings by using the Scanner Settings app.

The CHS can only be paired with one device at a time. To use the CHS with a different device, see Appendix F for unpairing instructions.

APPENDIX F SPECIAL BUTTON SEQUENCES

RESTORING FACTORY DEFAULTS

To restore the CHS to its factory defaults, do the following:

1. Power on the CHS.

2. While pressing the trigger button, briefly press and release the power button.

3. After about 15 seconds, the CHS will beep. Release the trigger button. If you performed the actions correctly, the CHS will beep 5 times and power off.

4. The next time you power on the CHS, it will take longer than normal. After the CHS finishes powering on, it will have factory default settings (HID mode for Keyboards).

UNPAIRING THE CHS

The CHS 8Ci can be connected to only one device at a time. Disconnect before making a new connection.

To disconnect your CHS:

- 1. Power off press and hold down the power button until the CHS beeps (high-low tone).
- 2. Power on press and hold down the power button until the CHS beeps (low-high tone).

Your CHS is ready to reconnect.

APPENDIX G CONNECTION BARCODES

If the CHS supports SPP mode for your OS, you can generate and scan special barcodes to quickly connect to a computer or device.

1. Power on the CHS. Make sure the CHS is in SPP mode. If needed, use the appropriate Command Barcode to change the scanner mode.

2. Enable *Bluetooth* on your computer or device.

3. Find out the *Bluetooth* Address of your computer or device. You can use the *Bluetooth* software to find this out.

4. Open SocketScan 10. In SocketScan 10 Settings, make sure an incoming COM is selected.

5. Use a barcode generating application or website (e.g., http://barcode.tec-it.com/) to create and print a barcode with the following properties.

Symbology Code 128

Data #FNIxxxxxxxxx#

Where the xxxxxxxxxx is the 12 character *Bluetooth* Device Address of the computer or device you want to connect to.

Barcode (Module) Width: approx. 1 inch or 3 cm recommended

- 6. Scan the barcode that you created.
- 7. If prompted, accept the *Bluetooth* connection.
- 8. If prompted for a passkey, enter 0000 (four zeroes).

APPENDIX H TROUBLESHOOTING

GENERAL TROUBLESHOOTING FOR ALL OPERATING SYSTEMS

SYMPTOM: When I try to scan, I aim the beam at the barcode, but no data appears on my screen, and the beam eventually turns off.

POSSIBLE REASON	SOLUTION
The scanner is too close or too far from	Practice scanning at different distances and angles so you get
the barcode, or at an incorrect angle	accustomed to the most effective position.
The barcode is incorrectly formatted,	Try scanning a barcode that is correctly formatted, printed
damaged or poorly printed.	clearly, and in good condition.
The barcode symbology may be	Enable the symbology. If you are using the CHS in SPP mode,
disabled or not supported by the CHS.	use the symbology selector feature of SocketScan software. If
	you are using the CHS in HID mode, please refer to the
	SocketScan Advanced Programming Guide for instructions.
	If you do not know the symbology of the barcode, and the
	CHS works in SPP mode for your computer / device, you can
	use the Scanner Settings utility to test scanning the barcode
	and determine its symbology.
You don't have an application open to	Open an application (e.g., a spreadsheet). Place the cursor
scan data into.	where you want to enter data. Try scanning again.

SYMPTOM: My computer/device cannot find the CHS, and/or I get an error message saying that there are connection problems.

POSSIBLE REASON	SOLUTION
The computer/device is too far from	Move the devices closer together, within a range of 10-15 m.
the CHS.	
The CHS is not powered on.	Power on the CHS.
You are using the CHS in SPP mode and	Remove any settings that assign another device as your
have assigned another device as your	default Bluetooth serial device.
default Bluetooth serial device.	
Your computer/device does not have	Enable <i>Bluetooth</i> on your computer/device and make sure
Bluetooth enabled and/or the	the <i>Bluetooth</i> software is running.
Bluetooth software is not running.	
The CHS is already paired with another	Unpair the CHS. See Appendix F for instructions.
computer/device.	

SYMPTOM: The *Bluetooth* device search has found multiple CHS devices, and I don't know which one to choose.

POSSIBLE REASON	SOLUTION
The CHS is not paired with a host system, and	Power off the CHS device(s) you do not want to
there are multiple CHS devices in range.	connect to and the <i>Bluetooth</i> device search.
	Alternatively, If the CHS works in SPP mode with
	your computer/device, you can use the SocketScan
	Scanner Settings utility to change the scanner's
	Bluetooth friendly name to something you can
	easily recognize.

SYMPTOM: When I scan a barcode, odd behaviors occur, such as different applications seem to be invoked in my system, and/or special characters are displayed in the application unexpectedly.

POSSIBLE REASON	SOLUTION
In HID mode, the CHS will only properly read	Use the SocketScan 10 SDK to develop a custom
printable ASCII characters. Non-printable ASCII	application that supports non-printable ASCII
characters or extended characters cannot be	characters. Learn more about the SDK at:
interpreted by the scanner. Printable ASCII	http://www.socketmobile.com/products/sdk/
characters are numbers between 0x20 and 0x7E,	
and any ASCII characters that fall outside of this	
scope are considered as non-printable.	

SYMPTOM: When I press the Shift, Caps Lock or Ctrl key on my keyboard, it affects the data output from my CHS to my computer.

POSSIBLE REASON	SOLUTION
You are using the CHS in HID mode as a Keyboard	Determine how your computer implements HID
class device.	keyboard devices.

SYMPTOM: When I scan some barcodes with the CHS in SPP mode, the data is truncated or some characters are corrupted.

POSSIBLE REASON	SOLUTION
The barcode data has illegal characters.	If you have a truncated barcode, you can view the
SocketScan 10 is designed to read ASCII characters	raw data without any conversions by using the
between 0x20 (Space) and 0x7F.	Test option of Scanner Settings, with hexadecimal
	format selected. If you need to scan data that is
	not 7 bit ASCII (e.g., Double Byte, MultiByte or
	UNICODE for Kanji, simplified Chinese, etc.) use
	the SocketScan 10 SDK.

TROUBLESHOOTING FOR ANDROID OS

SYMPTOM: The CHS won't reconnect to my Samsung Galaxy or Dell Streak any more.

POSSIBLE REASON	SOLUTION
This is a known issue for Bluetooth for these	Disable and enable Bluetooth on your Android
devices.	device and try again.

APPENDIX I TECHNICAL SUPPORT

If you have trouble installing or using the CHS, Socket has different support options to help you.

Online Knowledge Base: Search for articles, Frequently Asked Questions or Hot Topics 24 hours a day. http://support.socketmobile.com/EU_S1a.asp

Online Requests: Register your product and submit a question to our Technical Support Team. http://support.socketmobile.com

LIMITED WARRANTY

Socket Mobile Incorporated (Socket) warrants this product against defects in material and workmanship, under normal use and service, for one (1) year from the date of purchase. Product must be purchased new from a Socket Mobile Authorized Distributor or Reseller. Products purchased through non-authorized channels are not eligible for this warranty support.

EXCLUDES: Consumables such as batteries, removable cables, cases, straps, stylus, memory cards, chargers and CF-to-PC Card adapters (90 day coverage only)

An extended warranty is available separately for the *Bluetooth* Cordless Hand Scanner. For more information, please visit: http://support.socketmobile.com

Incompatibility is not a defect covered by the Socket warranty. During the warranty period, Socket will, at its option, repair or replace the defective product at no charge when furnished with proof of retail purchase, provided that you deliver the product to Socket or to an authorized Socket Service Center.

The returned product must be accompanied by a return material authorization (RMA) number issued by Socket or by a Socket Service Center. If you ship the product, you must use the original container or equivalent and you must pay the shipping charges to Socket. Socket will pay surface shipping charges back to any location in the contiguous United States. This warranty applies only to the original retail purchaser and is not transferable.

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REGULATORY COMPLIANCE

The Socket *Bluetooth* Cordless Hand Scanner is designed to be compliant with the rules and regulations in locations where they are sold and will be labeled as required. This product is type approved — users are not required to obtain license or authorization before using.

This product has been certified as conforming to technological standards. Therefore, the following actions are punishable by law:

- Disassembly or modification of this product
- Removal of identification labels on the back of the product

The frequency used by this product is also used by industrial, scientific and medical devices, such as microwave ovens, as well as wireless detectors for motion detectors, such as those requiring licenses used on manufacturing lines or similar radio transmitters (all of these wireless devices will be called "other wireless transmitters" below). Most modern electronic equipment (e.g., in hospitals and cars), is shielded from RF energy. However, certain electronic equipment is not.

- 1. Please ensure that all medical devices used in proximity to this device meet appropriate susceptibility specifications for this type of RF energy.
- 2. In the unlikely event that there is electronic interference between this system and other wireless transmitters, quickly change the location of operation or stop operating the unit (cease signal transmission).
- 3. If other electrical interference or related problems occur, contact Socket technical support at http://support.socketmobile.com/

RADIO FREQUENCY INTERFERENCE REQUIREMENTS

This device complies with part 15 of the FCC rules. Operation is subject to the following conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject

to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

This equipment is also ETS EN300 328-2, ETS EN301 489-1 and ETS EN301 489-17 compliant. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment.

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his or her own expense.

This equipment generates and radiates radio-frequency energy. To comply with FCC RF exposure compliance requirements, the following antenna installation and device operating configurations must be satisfied: (1) Users are not permitted to make changes or modify the system in any way, and (2) connecting external antennas to the *Bluetooth* Cordless Hand Scanner is prohibited. This device and its antenna must not be co-located or operated with any other antenna or transmitter.

To comply with Industry Canada RF exposure compliance requirements, the following antenna installation and device operating configurations must be satisfied: The installer of this radio equipment must ensure that the antenna is located or pointed such that it does not emit RF field in excess of Health Canada limits for the general population; consult Safety Code 6, available at Health Canada's website http://www.hc-sc.gc.ca/

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user may try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna of the radio or television.
- Increase the distance separating the equipment and the receiver.
- Connect the equipment to an outlet on a different branch circuit than that of the receiver.
- Consult the dealer or an experienced radio/TV technician for help.

The user may find the following booklet helpful: *How to Identify and Resolve Radio-TV Interference Problems,* available from the U.S. Government Printing Office, Washington, D.C. 20402.

CANADA CERTIFICATION

The marking of "IC:2394A-CHS1" on the device means: "2394A-CHS1" is the certification number, and the term "IC' before the equipment certification number only signifies that Industry Canada technical specifications were met.

RADIO FREQUENCY INTERFERENCE REQUIREMENTS – CANADA

This Class B digital apparatus meets the requirements of the Canadian Interference-Causing Equipment Regulations. Cet appareil numérique de la Classe B respecte toutes les exigencies du Reglement sur le Matériel Brouilleur du Canada.

CE MARKING & EUROPEAN UNION COMPLIANCE

Products intended for sale within the European Union are marked with a CE Mark which indicates compliance to applicable Directives and European Normes (EN), as follows. Amendments to these Directives or ENs are included: Normes (EN), as follows:

APPLICABLE DIRECTIVES:

- Radio and Telecommunications Terminal Equipment Directive 1999/5/EC
- Low Voltage Directive 73/23/EEC

APPLICABLE STANDARDS:

- EN 55 022 Limits and Methods of Measurement of Radio Interference Characteristics of Information Technology Equipment.
- EN 50 082-1 Electromagnetic Compatibility General Immunity Standard, Part 1: Residential, Commercial, Light Industry.
- IEC 801.2 Electromagnetic Compatibility for Industrial Process Measurement and Control Equipment, Part 2: Electrostatic Discharge Requirements.
- IEC 801.3 Electromagnetic Compatibility for Industrial Process Measurement and Control Equipment, Part 3: Radiated Electromagnetic Field Requirements.
- IEC 801.4 Electromagnetic Compatibility for Industrial Process Measurement and Control Equipment, Part 4: Electrical Fast Transients Requirements

BATTERY WARNING:

- Your device contains a rechargeable NiMH battery. Never throw the battery into a fire, as that could cause the battery to explode.
- Never short-circuit the battery by bringing the terminals in contact with another metal object. This could cause personal injury or a fire, and could also damage the battery.
- Never dispose of used battery with other ordinary solid wastes. Batteries contain toxic substances.
- Dispose of used battery in accordance with the prevailing community regulations that apply to the disposal of batteries. Cover the metal terminals with insulating tape. (This is to prevent accidental short-circuiting).
- Never expose the battery to any liquid.
- Always keep the battery out of reach of infants or small children.
- Never shock the battery by dropping it or throwing it.
- Dispose of a spent or damaged battery promptly.

PRODUCT DISPOSAL

Your device should not be placed in municipal waste. Please check local regulations for disposal of electronic products.

7/2013

Printed in U.S.A